

24 May 2022

Xantippe Continues with Key Development Milestones

Exercise of option to acquire Luz Maria Lithium Brine Tenement in Argentina

Highlights:

- 👉 Option to acquire “Luz Maria”, a highly prospective lithium tenement in Catamarca, Argentina – in the heart of the “Lithium Triangle” exercised.
- 👉 Luz Maria has a total area of ~3,400 Hectares (Ha) in close proximity to Lake Resources (ASX:LKE) Kachi project; XTC now building a strong land position.
- 👉 Previous drilling confirmed lithium rich brine at depth.

Xantippe Resources Limited (ASX: XTC) (Xantippe, XTC, or the Company) is pleased to advise it has, exercised its option to acquire the Luz Maria tenement prospective for lithium brine deposits in Catamarca, Argentina known as the Carachi Pampa Lithium Project.

Xantippe Managing Director, Richard Henning, commented:

“In exercising the option to acquire the Luz Maria tenement, Xantippe has increased its holding by 3,383 hectares in the Latin American lithium triangle. Together with La Sofia, Rita and Rita I, XTC now holds almost 12,400 hectares.

We are pleased to have acquired such high quality projects, located next to Tier One clean lithium projects. Work is underway to obtain necessary approvals to start exploration activities. Exploration will commence as soon as possible.

The acquisition of Luz Maria extends our footprint in the Catamarca province in Argentina. The Company’s objective is to produce a ESG Lithium product using direct lithium extraction (DLE) which requires a smaller environmental footprint, provides optimal yield and efficient use of water.”

Carachi Pampa Lithium Project

The target area is a proven paleo salt flat with lithium brine potential. XTC currently has option agreements covering almost 12,400 Ha suitable for Direct Lithium Exchange processing (DLE) and is part of an XTC strategy to acquire atleast 17,000 Ha within the Catamarca region.

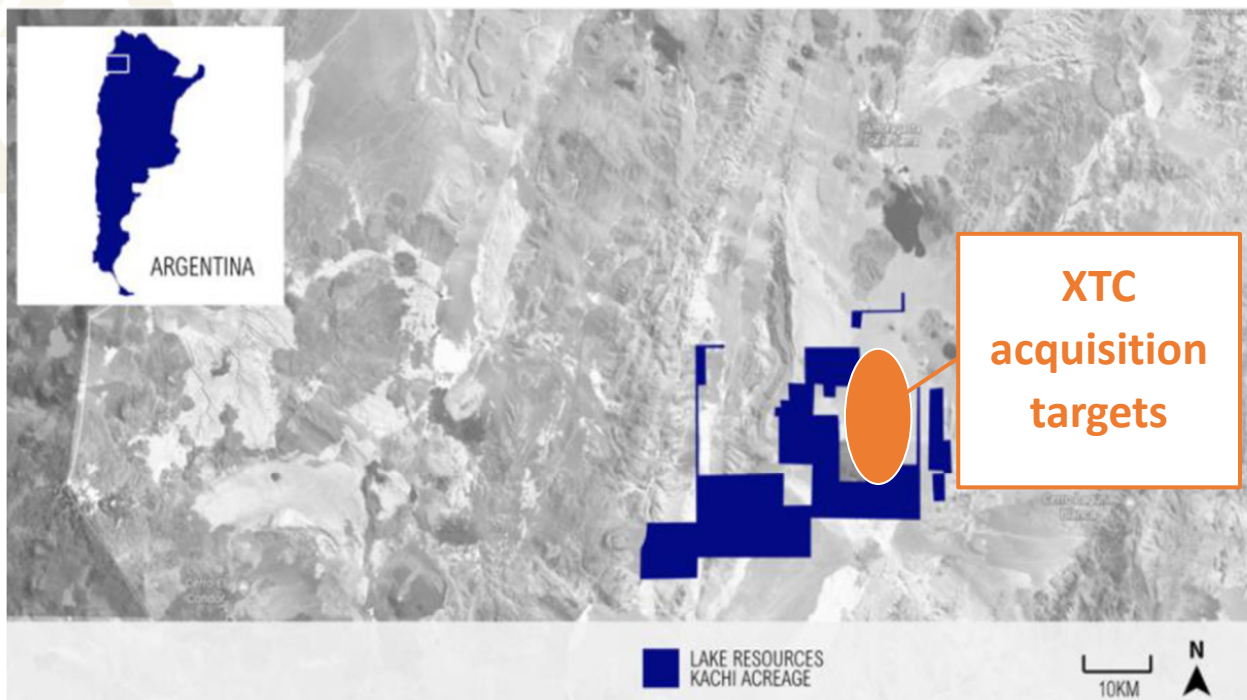


Figure 1: Location of Lake Resources' (ASX:LKE) Kachi Acreage and acquisition focus of XTC, Argentina.

Tenement Details

Luz Maria has title on 1 mining property owned by Crydon SA, a company unrelated to Xantippe controlled by Senor and Senora Santos (**Luz Maria Owners**), as follows:

Mine	Administrative File
Luz Maria	1209-C-2006

Proposed Exploration

A exploration program is being developed along with securing the necessary exploration approvals.

The Luz Maria exploration program will focus on further exploring the high electrically conductive zone already identified under the alluvial fan cover. This horizon has previously been confirmed by drilling two holes and despite technical issues encountered, both holes confirmed lithium bearing brine at depth. The interpreted NW-SE structures that control the regional setting of the Puna could define different domains in the basin infill and/or different hydraulic behavior. Nevertheless, it is clear that the brine rich horizon or paleo-salar is present in depth. Future efforts will focus on the evaluation of this NW-SE structural control (geophysics) and drilling to better define the brine system already identified.

Luz Maria

The Luz Maria property covers over 3,383Ha on Carachi Pampa salt flats adjacent to Lake Resources project (ASX:LKE) in Catamarca Province, Argentina. It lies in the centre of the Carachi basin and the

main outcropping units are alluvial fans and a small portion of a salt lake. The presence of superficial brine and a paleo salar in depth is backed up by the available information in the area.

The lithium brine target in Carachi Pampa is a paleo salar found at depth. This paleo salar continues under the cover of a more recent alluvial fan to the northeast and west of LKE areas. The target areas are covered by alluvial fans and easy to access.

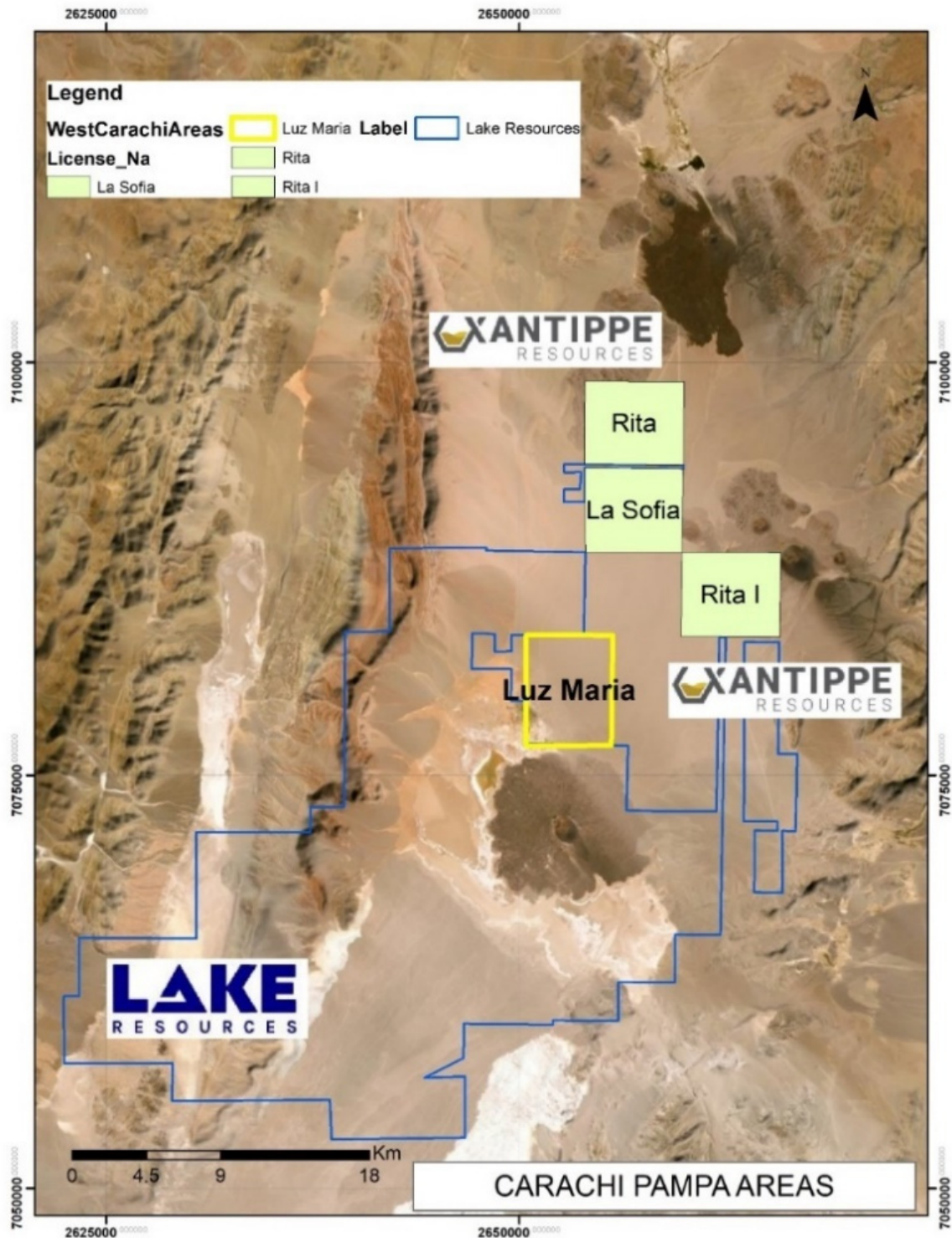


Figure 2: Carachi Pampa Lithium Project location Map

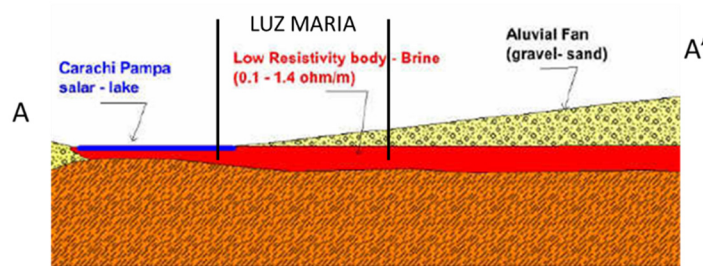
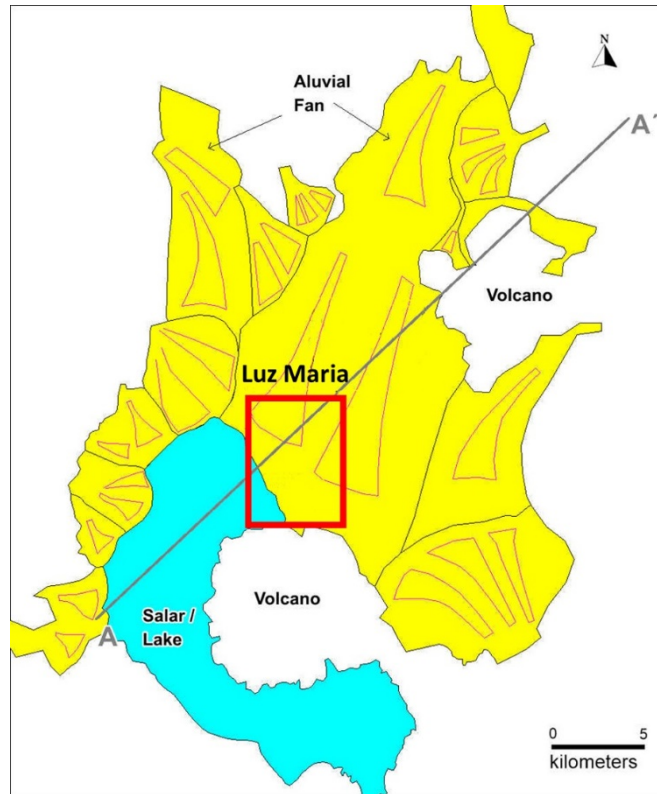


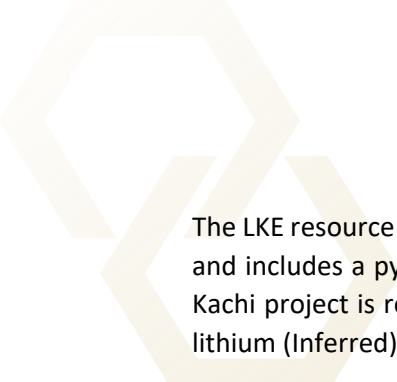
Figure 3: Geomorphological units showing alluvial cover and continuation of brine saturated level (subject areas in red). Wells confirming Li bearing brine in blue. (Modified from NRG, 2016)

Lithium South (formerly NRG metals TSX:NRG) previously conducted a Vertical Electrical Sounding (VES) survey consisting of 6 stations inside the property reaching up to 300-350 metres. Four units were interpreted starting with dry sediments at the surface followed by a transition between fresh water to brines.

Luz Maria has potential to be the main prospect area of a larger project. Reported results confirm the potential for lithium rich brine at depth as well as the concept model further developed by Lake Resources.

The accumulated drilling experience since the last works carried out in the property suggests that saturated levels can be tested with more confidence and assure sample quality in order to evaluate the resources and develop a project.

In summary, Luz Maria has historical geological data from previous drilling campaigns and the titles are confirmed as up to date.



The LKE resource of 4.4 million tons LCE was defined after studying an area of 17,000 Ha with 14 wells and includes a pyroclastic complex (ASX: LKE 27 November 2018). The resource estimate at the LKE Kachi project is reported as 1M tonnes at 290mg/L Lithium (Indicated) and 3.4M tonnes @210mg/L lithium (Inferred) (ASX: LKE 27 November 2018).

The Rita & Rita I area covers more than over 6,000 Ha; La Sofia adds another 3,000 Ha for a total of 9,000 Ha; Luz Maria almost 3,400 Ha.

Further efforts are continuing to expand the XTC holdings in the salt flat area, through the Arecco Group.

Terms of the Acquisition

Pursuant to the Option Agreement previously announced on 29 November 2021, Xantippe exercised its option to acquire all the issued capital in Carolina Lithium on 7 March 2022. Carolina Lithium is entitled to become the beneficial owner of Arlupo SA, a company registered in Argentina that holds the rights to the acquisition of the Luz Maria tenement under a letter of offer with the owner previously announced on 25 February 2022 (**Offer Agreement**).

Under the Offer Agreement, the following consideration will be payable by the Company to acquire the Luz Maria tenement:

1. US\$2,180,000 payable to the Luz Maria Owners upon exercise of the Option and signing a definitive acquisition agreement within 3 months of the option being exercised. The definitive agreement is anticipated to be finalised shortly.
2. US\$10,000,000 payable to the Luz Maria Owners in two separate payments detailed below:
 - a. US\$3,000,000 payable 6 months after signing the definitive agreement; and
 - b. US\$7,000,000 payable 12 months after signing the definitive agreement.

Further, XTC will issue shares to the value of US\$10,000,000 to the Luz Maria Owner 180 days after signing the definitive agreement and subject to shareholder approval.

This announcement has been approved for release by the Board of Xantippe Resources.

For more information, please contact:

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